Tornado Safety in Schools

Every School Should Have a Severe Weather Safety Plan

- ▼ Develop an action plan with frequent drills. Review the plan annually and anytime changes are made to the building, shelters, or classroom sizes. A good time to practice is during the annual statewide Tornado Drills held in April.
- Each school should be inspected and shelter areas designated by a registered engineer or architect.

 Basements offer the best protection. Schools without basements should use interior rooms and hallways on the lowest floor and away from windows. Put as many walls as possible between the students and the storm.
- Make special provisions for disabled students and those in portable classrooms.
- N Ensure students know the protection position. It doesn't matter if the students face the wall or put their backs to the wall, as long as they cover their head.
- Each school should have a NOAA Weather Radio All Hazards with battery back-up. Make sure the weather radio or other source of weather news is available even during after school activities.



Pleasantview Elementary

- If the school's alarm system relies on electricity, have an alternate method to notify teachers and students in case of power failure, such as an air horn or megaphone. Make sure everyone knows what the notification signal is.
- **V** Delay lunches or assemblies in large rooms if severe weather is anticipated. Gymnasiums, cafeterias, and auditoriums offer no protection from tornado-strength winds.
- **V** During threatening weather, keep children at school beyond regular hours until the storms pass. Children are safer at school than in a bus or car.
- **V** Hospitals, nursing homes, and other institutions should develop similar plans.

You can prepare for the dangers from severe weather by learning the safest places to seek shelter in the school. Learn basic weather terms and danger signs. The chances of staying safe during severe weather are greater if you have a plan for your school, and practice the plan frequently.

Tornado Safety at Home, Work, or at Play

Have a Plan at Home, at Work, and When You're Away

- In a home or building, move to a pre-designated shelter, such as a basement, and get under a sturdy table or the stairs.
- If a basement is not available, move to a small interior room or hallway on the lowest floor and get under a sturdy table. Put as many walls as possible between you and the storm.
- **V** Stay away from windows.
- Do not try to outrun a tornado in your vehicle. Instead, leave it immediately for a safe shelter. If caught outside or in a vehicle, and shelter is not available, lie flat in a nearby ditch or depression and cover your head with your hands.
- Mobile homes, even if tied down, offer little protection from tornadoes. You should leave a mobile home and go to the designated storm shelter or the lowest floor of a sturdy nearby building.
- When vacationing, always bring along a NOAA Weather Radio All Hazards and have a place of safety in mind in the event severe weather threatens.

Tornado Myths and Truths

MYTH: Areas near lakes, rivers, and hills are safe from tornadoes.

TRUTH: No place is safe from tornadoes. The tornado that struck Door County in August 1998 formed on the waters of Green Bay and moved onshore, causing over \$5 million in damage.

MYTH: The low pressure with a tornado causes buildings to "explode" as the tornado passes overhead.

TRUTH: Violent winds and debris slamming into buildings cause most structural damage.

MYTH: Windows should be opened before a tornado approaches to equalize pressure and minimize damage.

TRUTH: Leave windows alone. The most important action is to immediately go to a safe shelter.

MYTH: If you are driving and a tornado is sighted, you should turn and drive at right angles of

TRUTH: The best thing to do is to seek the best available shelter. Many people are injured or killed when remaining in their vehicles.

MYTH: People caught in the open should seek shelter under highway overpasses.

TRUTH: Take shelter in a sturdy, reinforced building if at all possible. The winds of a tornado may actually increase in the tight space of an overpass, increasing the chance for injury.

Lightning Safety for Coaches and Officials

Lightning Kills...Play it Safe!

- All thunderstorms produce lightning and are dangerous. In an average year, lightning kills more people in the U.S. than either tornadoes or hurricanes.
- Lightning often strikes outside the area of heavy rain and may strike as far as 10 miles from any rainfall.
- If you hear thunder, you are in danger! Anytime thunder is heard, the thunderstorm is close enough to pose an immediate lightning threat to your location.
- Have a lightning safety plan. Designate a safe location before the event starts. Have specific guidelines for suspending the activity so that everyone has time to reach safety.
- Prior to a practice or event, check the latest forecast. If thunderstorms are expected, consider postponing activities early to avoid being caught in a dangerous situation.
- If you hear thunder, suspend your activity immediately and instruct everyone to get to a safe place. Substantial buildings provide the best protection. Avoid sheds, small or open shelters, dugouts, bleachers, and grandstands. If a sturdy building is not nearby, a hard-topped metal vehicle with windows closed will offer good protection.
- If boating or swimming, get to land and find shelter.
- Do not resume activities until 30 minutes have passed since the last thunder was heard.

Lightning Myths and Truths

MYTH: If it is not raining, there is no danger from lightning.

TRUTH: Lightning can strike outside of rain. If you hear thunder, the storm is close enough to pose a lightning threat.

MYTH: The rubber soles of shoes or rubber tires on a vehicle will protect you from lightning.

TRUTH: Rubber-soled shoes and rubber tires provide NO protection from lightning. The steel frame of a hard-topped vehicle provides increased protection if you are not touching metal. Although you may be injured if lightning strikes your car, you are much safer inside a vehicle than outside.

MYTH: People struck by lightning carry an electric charge and should not be touched.

TRUTH: Lightning-strike victims carry no charge and should be attended to immediately. Contact your local American Red Cross chapter for information on CPR and first aid classes.

MYTH: "Heat lightning" occurs after very hot summer days and poses no threat.

TRUTH: Heat lightning is a term used to describe lightning from a thunderstorm too far away for thunder to be heard.

Stay Informed with NOAA Weather Radio All Hazards

The "Smoke Alarm" for Severe Weather

The NOAA National Weather Service continuously broadcasts forecasts, warnings, and advisories that can be received with a NOAA Weather Radio All Hazards. There are 30 weather radio broadcast stations in and near Wisconsin, serving all 72 counties.

The radios can be purchased at many electronics and department stores and via the Internet from on-line merchants. Make sure the radio you purchase has a battery back-up and the Specific Area Message Encoder feature which alerts you to emergency messages for your individual county.



NOAA Weather Radio All Hazards provides immediate broadcasts of weather warnings and civil emergency messages, directly from the National Weather Service, to give those in harm's way critical lead time to respond and remain safe. Such messages include winter storm watches and warnings, tornado warnings, flood warnings, chemical spill notifications, and many others.

Severe Weather Watches and Warnings

What to Listen For...

When conditions are favorable for severe weather to develop, a WATCH is issued. As storms develop, National Weather Service personnel use information from weather radar, storm spotters, and other sources to issue Severe Thunderstorm and Tornado WARNINGS for areas where severe weather is imminent.

Watches and warnings are relayed to local radio and television stations and are broadcast on NOAA Weather Radio All Hazards.

Local public safety officials also get the warnings, and can activate local warning systems to alert communities.

Tornado Watch: Severe thunderstorms with tornadoes are possible in your area. Remain alert for approaching storms. Be prepared to move to safety if a **Warning** is issued. Know what counties are in the watch area by listening to NOAA Weather Radio All Hazards or local radio or television stations.

Severe Thunderstorm Watch: Thunderstorms with large hail and damaging winds are possible. Be prepared to move to safety if a **Warning** is issued.

Tornado Warning: A tornado has been sighted or indicated by weather radar. Move to a place of safety now!

Severe Thunderstorm Warning: A thunderstorm with large hail and damaging winds has been reported or indicated by weather radar.

Warnings indicate imminent danger to life and property to those in the path of the storm!

Flood Safety

Turn Around, Don't Drown!

- Avoid walking, swimming, or driving in flood waters.
- ♦ Stay away from high water, storm drains, ditches, ravines, or culverts. If the water is moving swiftly, water only six inches deep can knock you off your feet.
- ♦ Two feet of moving water can float most full-size vehicles.
- Do not let children play near storm drains.
- ♦ If you come upon flood waters—Turn around, don't drown!



For More Information...

Check out these web sites for more safety tips, the latest weather forecast, and other weather awareness information.

Tornado Preparedness Plan for Schools

http://www.crh.noaa.gov/arx/prepare school.php

Lightning Safety

http://www.lightningsafety.noaa.gov

Flood Safety

http://www.srh.noaa.gov/tadd

NOAA Weather Radio All Hazards

http://www.weather.gov/nwr

NOAA National Weather Service – *Forecasts and Warnings*

http://www.weather.gov

StormReady – Community Preparedness

http://www.stormready.noaa.gov

Wisconsin Emergency Management – Emergency Preparedness

http://emergencymanagement.wi.gov

American Red Cross – Safety Information

http://www.redcross.org

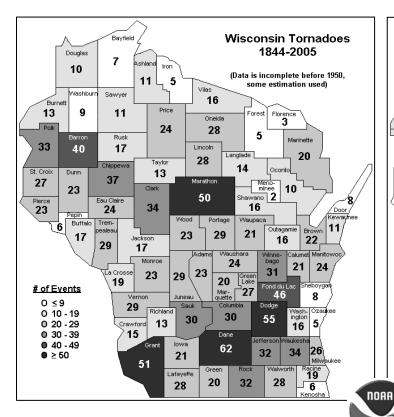
FEMA For Kids – *Emergency Preparedness for Kids*

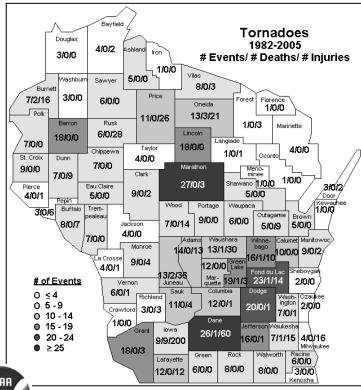
http://www.fema.gov/kids

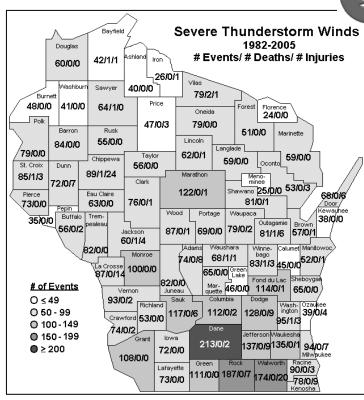


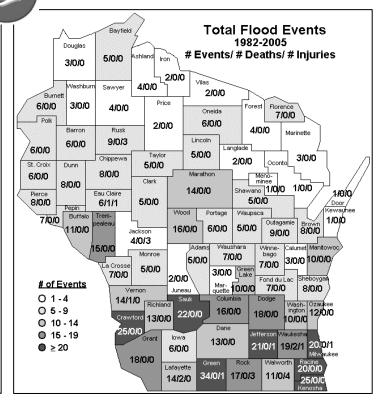


Severe Weather Maps









Wisconsin Tornado Weather Facts

- Wisconsin averages 21 tornadoes a year.
- In 2005, a record 62 tornadoes hit the state. On August 18, 2005, the NWS confirmed 27 tornadoes in Wisconsin, a one-day record.
- The peak tornado season in Wisconsin is April to August, but tornadoes can occur anytime of year.
- Tornadoes can occur anytime during the day or night, but are most frequent between 4 pm and 9 pm.
- About 80% of tornadoes that hit Wisconsin are relatively weak, with winds under 110 mph. Only 1% are violent with winds over 200 mph.

Other Weather Awareness Dates

Wisconsin's NOAA Weather Radio Awareness Day May 17, 2006

Wisconsin's Heat Awareness Day June 15, 2006

> National Lightning Safety Awareness Week June 18–June 24, 2006

Wisconsin's Winter Weather Awareness Week November 13–17, 2006



